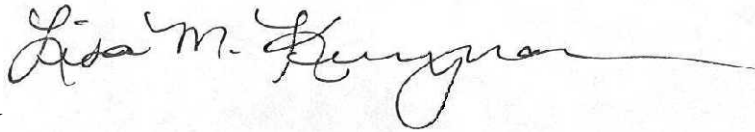


*Flex your Power!
Be energy efficient!*

Memorandum

To: CHIEF DEPUTY DIRECTOR
DEPUTY DIRECTORS
DISTRICT DIRECTORS
DIVISION CHIEFS

Date: July 25, 2008



From: LISA M. KUNZMAN,
Chief
Division of Equipment

Subject: Fuel Conservation

Good stewardship of State resources is a fundamental goal of the California Department of Transportation (Caltrans) and the responsibility of all Caltrans employees. Caltrans' policy is that travel only be related to essential services to improve mobility across California. With the increasing cost of fuel, it is critical that the following fuel conservation measures are adhered to:

Observe the Speed Limit

- While each vehicle reaches its optimal fuel economy at a different speed (or range of speeds), gas mileage usually decreases rapidly at speeds above 60 miles per hour (mph).
- Assume that each 5 mph driven over 60 mph is like paying an additional \$0.30 per gallon of gas.
- Driving at higher speeds increases the aerodynamic drag (wind resistance), reducing fuel economy. New Environmental Protection Agency's tests account for aerodynamic drag up to highway speeds of 80 mph.

Avoid Excessive Idling

- Idling gets 0 miles per gallon. Cars with larger engines typically waste more gas at idle than do cars with smaller engines.
- Ten seconds of idling uses more fuel than turning off the engine and restarting it.

- Excessive idling can be hard on the engine. Because the engine isn't working at peak operating temperature, fuel does not undergo complete combustion. This leaves fuel residues that contaminate engine oil and make spark plugs dirty.
- Idling actually lowers the coolant temperature faster than shutting off the engine for vehicles with diesel engines. In other words, switching off the engine keeps the engine warm longer.
- Refer to Deputy Directive, DD-96, Unnecessary Idling of the Department's Fleet Vehicles and Equipment, for additional information regarding Caltrans' policy on unnecessary idling.

Pre-Operational Check List

- Perform safety check of the vehicle before each use.
- Includes keeping tires properly inflated.

Preventative Maintenance

- Regular preventative maintenance and service of vehicles.
- Bring vehicles to the Equipment Shop when scheduled.

Bulk Fuel

- Reduce fuel costs by filling vehicles at bulk fuel sites whenever feasible.

If you have questions about fuel conservation measures, please contact Steve Kotani, Division of Equipment at (916) 227-6472.

References:

<http://www.fueleconomy.gov/feg/drive.shtml>

<http://www.climatechangeconnection.org/Solutions/20Thingsyoushouldknowaboutidling.htm>

[http://onramp.dot.ca.gov/hq/equipment/operations/Handbook/3-](http://onramp.dot.ca.gov/hq/equipment/operations/Handbook/3-Equipment/3.39Light_Duty_Vehicle_Pre-Op.pdf)

[Equipment/3.39Light_Duty_Vehicle_Pre-Op.pdf](http://onramp.dot.ca.gov/hq/equipment/operations/Handbook/3-Equipment/3.39Light_Duty_Vehicle_Pre-Op.pdf)

http://onramp.dot.ca.gov/hq/equipment/operations/training/apprentice/New_Chapters/Chapter_5.pdf